

especially hard to detect and respond to. Mitigation of disease risk requires overlaying of climate-related migration risk with foci of disease epidemics.

A BROADER VIEW OF CLIMATE CHANGE AND HEALTH

Climate change has far-reaching implications for the distribution and spread of infectious diseases worldwide. However, the greatest disease burdens related to climate change may not be due to infections. Because climate change disrupts the foundations of health, such as access to safe drinking water and food, it has the potential to undermine progress against major existing health problems such as malnutrition. In addition, resource scarcity and climate instability are increasingly associated with conflicts. Scholars have argued that events related to climate change were a factor in the revolutions of the Arab Spring and the Syrian civil war.

The public health response to climate change entails both mitigation and adaptation measures. *Mitigation* represents primary prevention and involves the reduction of greenhouse gas emissions into the atmosphere. Although no clear safety threshold of greenhouse gas emissions has been agreed upon, national governments from the major industrialized countries have agreed to set a warming target of $<2^{\circ}\text{C}$ above preindustrial levels by 2050; the attainment of this goal will require reducing greenhouse gas emissions by 40–70% below 2010 levels. To date, no international agreement exists to facilitate this reduction. *Adaptation* represents secondary prevention and is aimed at reducing the harms associated with sea level rise, heat waves, floods, droughts, wildfires, and other greenhouse gas-driven events. The efficacy of adaptation is constrained by the challenges inherent in predicting the precise location, duration, and severity of extreme weather events and flooding related to sea level rise, among other considerations.